Title (en)
CONTROL OF A BRUSHLESS MOTOR

Title (de)
STEUERUNG EINES BÜRSTENLOSEN MOTORS

Title (fr)
COMMANDE D'UN MOTEUR SANS BALAIS

Publication
EP 2559154 B1 20180221 (EN)

Application
EP 11713859 A 20110329

Priority
• GB 201006386 A 20100416
• GB 2011050630 W 20110329

Abstract (en)
[origin: GB2479625A] A method of controlling a brushless motor, the method comprising exciting a winding of the motor in advance of predetermined rotor positions by an advance period. A method of controlling a brushless motor in which a winding 7 of the motor is excited in advance of unaligned rotor positions by an advance period. The length of the advance period is defined by a waveform that varies periodically with time, and influences the amount of current driven into the winding 7 over an electrical half cycle of the motor, and in turn influences the amount of current drawn from the power supply. The waveform may be defined so as to shape the waveform of current drawn from the power supply so as to reduce the magnitude of low-order harmonics within the current waveform. An increase in power factor may be achieved without the need for a PFC circuit or high-capacitance link capacitor.

IPC 8 full level
H02P 6/14 (2016.01); **H02P 6/00** (2016.01); **H02P 6/08** (2016.01)

CPC (source: EP GB KR US)
H02P 6/14 (2013.01 - EP KR US); **H02P 6/15** (2016.02 - GB); **H02P 6/26** (2016.02 - EP KR US); **H02P 6/28** (2016.02 - EP KR US); H02P 2209/07 (2013.01 - EP KR US)

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
GB 201105198 D0 20110511; **GB 2479625 A 20111019**; **GB 2479625 B 20120725**; CN 102948068 A 20130227; CN 102948068 B 20150603; EP 2559154 A2 20130220; EP 2559154 B1 20180221; GB 201006386 D0 20100602; JP 2011229380 A 20111110; JP 5524123 B2 20140618; KR 101621911 B1 20160517; KR 20130027510 A 20130315; KR 20140107657 A 20140904; US 2011254487 A1 20111020; US 8773052 B2 20140708; WO 2011128660 A2 20111020; WO 2011128660 A3 20121011

DOCDB simple family (application)
GB 201105198 A 20110329; CN 201180029875 A 20110329; EP 11713859 A 20110329; GB 201006386 A 20100416; GB 2011050630 W 20110329; JP 2011090271 A 20110414; KR 20127030022 A 20110329; KR 20147021309 A 20110329; US 201113085155 A 20110412